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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/501,872 07/13/95 LEGENDRE

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0 022701-627  
EXAMINER

BULLOCK, I

ART UNIT PAPER NUMBER

6

1106  
DATE MAILED:

07/10/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire THREE month(s), ZERO days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I: THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
- ☒ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐ \_\_\_\_\_

Part II SUMMARY OF ACTION

- ☒ Claims 1-15 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
- ☐ Claims \_\_\_\_\_ have been cancelled.
- ☐ Claims \_\_\_\_\_ are allowed.
- ☒ Claims 1-15 are rejected.
- ☐ Claims \_\_\_\_\_ are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
- ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
- ☐ Formal drawings are required in response to this Office action.
- ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
- ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
- ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
- ☒ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
- ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
- ☐ Other

EXAMINER'S ACTION

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***Claim Rejections - 35 USC § 112***

Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of the term "active" throughout the claims is indefinite because it is not known what is meant by the said term.

Claims 11-15 are rejected under 35 U.S.C. § 112, fourth paragraph, as being of improper dependent form for failing to further limit the subject matter of a previous claim.

It is suggested that claims 11-15 each be in independent form.

***Claim Rejections - 35 USC § 102***

Claims 1-5 and 13-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Goodboy (U.S. 4,364,858).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Applicants claim a catalyst comprising an active alumina and an effective amount of sodium in the range of from 1,200 to 2,700 ppm.

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The reference to Goodboy teaches a Claus catalyst containing an active alumina and sodium oxide in an amount greater than 0.1 wt% of the catalyst, preferably between 0.1 and 2.5 wt% (col. 3, lines 54-59). The catalyst may also be used as a catalyst base to which additive compounds such as molybdenum, cobalt, nickel, calcium and others known to those skilled in the art may be added to enhance the specific properties of the catalyst (col. 6, lines 62-68).

***Claim Rejections - 35 USC § 103***

Claims 1-15 are rejected under 35 U.S.C. § 103 as being unpatentable over Goodboy (U.S. 4,364,858) and Dupin et al. (U.S. 5,244,648) or Carithers (U.S. 3,856,708).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under

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this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

The teachings of Goodboy are discussed above.

The differences between Goodboy and the claimed invention are that Goodboy does not teach any of the materials listed in claim 6 such as cellulose and size of the beads.

The reference to Dupin et al. teach active alumina agglomerates comprising sodium (col. 3, lines 18-49), cellulose (col. 3, lines 55-61), alkaline earth metal salts (col. 4, lines 42-64) and silica (col. 8, lines 39-42). Agglomeration of the catalyst is carried out known manners such as pelletizing, extrusion, and shaping into beads (col. 3, lines 50-54). The alumina agglomerates have variety of applications such as catalysts or catalyst supports (col. 8, lines 37-39 and col. 8, line 64 thru col. 9, line 8). Depending upon the use of the alumina agglomerates, various pore sizes may be produced ranging in sizes less than 100 angstrom to greater than 10,000 angstrom (col. 8, lines 54-63).

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Carithers teaches an activated alumina catalyst support having a macroporous structure with a total pore volume of at least about 0.7 ml/g, wherein a major portion of the total pore volume from pores larger than 700 angstrom is contributed by pores which are larger than 3,000 angstrom (col. 2, lines 45-67). The activated alumina is mixed with a filler material such as cellulose to facilitate formation of desirable macropores (col. 3, lines 47-67).


It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Goodboy and add cellulose as taught by Dupin et al. and Carithers because cellulose is a known pore forming agent and desired pore sizes may be obtained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to In Suk Bullock whose telephone number is (703) 308-3795. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Anthony McFarlane, can be reached on (703) 308-3806. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

*J. Bullock*  
I.B./A2  
July 2, 1996

  
ASOK PAL 7/2/96  
PATENT EXAMINER  
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